AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 09/944983 Filing Date: August 30, 2001

Title: CHEMICAL MECHANICAL POLISHING SYSTEM AND PROCESS

Page 2 Dkt: 1303.018US1

## IN THE SPECIFICATION

Please amend the paragraph beginning on page 1 line 27 as follows:

CMP is a semiconductor wafer flattening and polishing process that combines the chemical removal of semiconductor layers such as insulators and metals with the mechanical buffering of a wafer surface. Typically, CMP is used to polish or flatten wafers after crystal growing growth during the wafer fabrication process, and to polish or flatten the profiles that build up in multilevel metal interconnection schemes.

Please amend the paragraph beginning on page 6 line 8 as follows:

The present subject matter provides chemical mechanical polishing (CMP) systems and methods in which a rotating polishing pad drum is used to polish a wafer held by a platen. The polishing pad drum operably contacts the wafer through a relative linear movement between the wafer and the rotating polishing pad drum. The linear motion is characterized as being perpendicular (albeit in a different plane) to the axis of rotation of the polishing drum, which significantly increases the degree of long range planarization by reducing uniformity problems such as dishing and rounding of the features.

Please amend the paragraph beginning on page 11 line 4 as follows:

Figure 9 is a block diagram of one CMP system embodiment. According to this embodiment, the CMP system 900 includes a platen 902 and a polishing pad drum 904. The polishing pad drum 904 is adapted to be rotationally moved. A drum drive assembly 924 controls the rotational movement of the polishing pad drum 904. A controller 926 is coupled to and in communication with the drum drive assembly 924. According to various embodiments, the controller 926 and drum drive assembly 724 924 cooperate to control the direction, speed and/or timing of the rotational movement of the polishing pad drum 904.

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